

WIPING AWAY SSI

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Background Information: Surgical Site Infections (SSI) significantly increase lengths of stay, cost, morbidity, and mortality. Nasal carriage of *S. aureus* and bacteria on the skin increase the risk of developing SSI. Evidence supports reducing SSI's through *Staphylococcus aureus* screening and decolonization protocols with the addition of antibiotic prophylaxis.

Objectives of Project: Develop and implement a systematic approach to reduce surgical site infections (SSI) at 2 hospitals for identified high-risk elective surgeries: Cardiac, Total Joint, Spine, and Cranial surgeries.

Process of Implementation:

The proposed protocol was defined with support from nursing, epidemiology, and physician champions. Unit leaders then predicted optimal workflow (Pre-admission clinics, Pre-operative units, Informatics, Laboratory, Physician offices, and Infection control). Informatics developed new order sets and documentation templates. Physicians and office staff were educated. RNs and NACs were educated about: Defined patient population, nasal MRSA swab collection (RN), chlorhexidine (CHG) wipe use/application, nasal antiseptic (povidone-iodine solution) application, vancomycin antibiotic prophylaxis for known history of MRSA, and documentation. Patient Education about the process and CHG use was included during the "Total Joint Surgery" Class, pre-admission teaching, and pre-operative preparation. The protocol was initiated, staff compliance monitored, and SSI rates tracked.

Statement of Successful Practice:

Since implementation, first-quarter improvements reflect a 100% decrease in hip and 62% decrease in knee SSI in one hospital; a 19% decrease in hip and 100% decrease in knee SSI in the other hospital. Pre-admission clinic visits and pre-calls to enhance patient preparation, MRSA swab collection, CHG bathing, and surgery education are invaluable.

Project challenges include staff confusion and need for re-education as new patient De-Isolation protocols generated confusion; staff ethical angst as some patients benefit from the CHG wipes and others do not; and risk for patients presenting from inpatient/ED units to miss the CHG bathing prior to surgery.

Implications for Advancing the Practice of Perianesthesia Nursing:

SSI rates and staff compliance are monitored to ensure sustained improvement. Plans exist to include CHG bathing on inpatient units the night prior to and morning of surgery. Operating room staff education about CHG wipes and nasal antiseptic application for on-call procedures may be helpful. Future plans may include expansion of the protocol for use with other procedures.